

Abstract Of The Disclosure

A method for optimizing the starting torque and for reducing the electrical power usage of a starter-generator of an internal combustion engine. The starter-generator is configured as an electrical machine, which is operated using an inverter or an indirect a.c. converter the electrical power P_{el} being made available by a vehicle battery. Before the imaginary turning point (31) on the torque curve (4) of the starter-generator is reached, the phase current of the electrical machine is limited. The electrical machine is controlled from the point at which a limiting point (32) is reached along the electrical limiting power curve (30) ($P=\text{const}$), such that the electrical power P_{el} corresponds to that at the stationary operating point (25) of the electrical machine.

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